

Particulate Matter (PM_{2.5}) Fact Sheet

June 29, 2004

- **What is Particulates or particulate matter (PM_{2.5})?**
PM_{2.5} is a criteria air pollutant. Particulate matter includes dust, soot and other tiny bits of solid or liquid materials that are released into or formed in the atmosphere. Particulates are produced by many sources, including burning of fossil fuels and wood, motor vehicle emissions, agricultural activities, and construction.
- **What are the health effects of PM_{2.5}?**
Studies have linked increased exposure to PM_{2.5} to increases in premature death as well as a range of serious respiratory and cardiovascular effects.
- **What is the Environmental Protection Agency's (EPA) role?**
EPA sets air quality standards and federal law requires these standards. In 1997, EPA revised the standards for evaluating PM_{2.5}. EPA plans to designate geographic areas as attaining or not attaining the new, more restrictive PM_{2.5} standard. If an area is exceeding the new minimum standard, then it will be designated as nonattainment.
- **What does PM_{2.5} nonattainment mean?**
Nonattainment means an area violates the fine particle standard or that it contributes to violations of the standard in a nearby area.
- **What does EPA's proposed designation for PM_{2.5} on 6/29 mean?**
The proposed designation means that EPA anticipates these counties will be formally designated as nonattainment on November 17, 2004.
- **What are the impacts from a nonattainment designation?**
A nonattainment designation could result in restrictions on economic development and transportation projects for that county.
- **What if a county is officially designated as PM_{2.5} nonattainment in November 2004?**
The designations become effective in February 2005. Restrictions on economic development and transportation projects for that county could then go into affect.
- **What's next?**
States and EPA will engage in joint consultation regarding final determination for PM_{2.5} nonattainment designations – leading up to the November 2004 announcement. Tennessee has a network of 24 monitors across the state taking year round particulate matter measurements. The most recent data from these monitors shows every site attaining the new, stricter PM_{2.5} standard except for monitors in Hamilton and Knox County. Tennessee will use the data from this monitoring network and an emissions inventory to engage EPA in joint consultation regarding final determinations.

State and local governments must detail how they will reduce fine particle pollution in nonattainment areas in plans demonstrating how it will meet EPA's standards - known as a state implementation plan (SIP). States must submit their SIP to EPA within three years after the designations become effective.

SIPs require emissions offsets for the new or expanding air pollution sources and conformity in new transportation projects.

Should the state not submit a plan or adhere to the plan, the EPA has the option to issue sanctions. The sanctions require greater offsets for emissions and the withholding of funds for transportation projects.

PM2.5 Developments in 2004

February 2004 - TDEC was required by federal law to identify areas that do not meet EPA's national air quality standards for fine particulate matter (PM2.5). Based on TDEC's most recent monitoring data and understanding of required federal guidelines, TDEC submitted Hamilton and Knox Counties as potential PM2.5 nonattainment counties.

June 29, 2004 - EPA announced its intent to designate nine Tennessee counties as nonattainment for PM2.5: **Anderson, Blount, Hamilton, Knox, Loudon, Marion, McMinn, Roane and Sevier**. In naming these additional counties, EPA feels that the additional counties significantly contribute to the PM2.5 nonattainment of Hamilton and Knox counties.

TDEC immediately contacted local elected officials in these counties to let them know of EPA's decision. TDEC reassured officials that the state will work closely with them as we move forward together in the formal PM2.5 nonattainment designation process.

July-November 2004 – States and EPA will engage in joint consultation regarding final determination for PM2.5 nonattainment designations.

November 2004 – EPA officially designates PM2.5 nonattainment counties.